

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-16 (cancelled).

17. (New) A method for controlling vehicle dynamics in a motor vehicle, comprising:
 recording, by at least one sensor, at least one measured value;
 controlling, by at least one actuator, vehicle dynamics as a function of the at least one measured value; and
 generating, by at least one image sensor system, image information from a motor-vehicle surround to control the vehicle dynamics, the at least one image sensor system including at least two image sensors to record a same scene.
18. (New) The method as recited in claim 17, wherein the image sensor system includes at least one stereo camera.
19. (New) The method as recited in claim 17, wherein at least one measured value is determined from the generated image information, the measured value being used for vehicle dynamics control.
20. (New) The method as recited in either claim 17, further comprising:
 determining at least one fixed image point from the generated image information;
 determining image coordinates of at least one fixed image point in at least two images of one image sequence; and
 determining the at least one measured value from the determined image coordinates, the measured value being used for vehicle dynamics control.
21. (New) The method as recited in claim 20, wherein the at least two images of one image sequence are successive.

22. (New) The method as recited in claim 17, wherein, as a measured value, at least one of: i) a rotational vector of the motor vehicle and ii) at least one motion vector of the motor vehicle, are determined from the generated image information.

23. (New) The method as recited in claim 17, wherein, as a measured value, at least one of a yaw rate, a yaw angle, and a lateral acceleration of the motor vehicle, are determined from the generated image information.

24. (New) A method for determining a motion of a motor vehicle, comprising:

generating image information from at least one image sensor system, the image sensor system including at least two image sensors which record a same scene of a motor vehicle surround, the image sensor system being at least one stereo camera; and

determining at least one of three-dimensional rotational motion of the motor vehicle, and three-dimensional translational motion of the motor vehicle, as a function of the image information.

25. (New) The method as recited in claim 24, wherein a viewing direction of the at least one image sensor system is in at least one of: i) a direction of travel, and ii) a direction opposite to the direction of travel.

26. (New) The method as recited in claim 24, wherein a viewing direction of the at least one image sensor system is disposed transversely to a direction of travel of the motor vehicle.

27. (New) A device for vehicle dynamics control in a motor vehicle, comprising:

at least one sensor for recording at least one measured value;

at least one actuator which is driven by a processing unit/control unit as a function of the at least one measured value for vehicle dynamics control; and

at least one image sensor system including at least two image sensors, the at least two image sensors configured to record a same scene, the image sensor system generating image information from a motor vehicle surround.

28. (New) The device as recited in claim 27, wherein the at least one image sensor system includes at least one stereo camera.

29. (New) The device as recited in claim 27, wherein the processing unit/control unit includes an arrangement configured to determine at least one measured value from the generated image information, the measured value being used for vehicle dynamics control.

30. (New) The device as recited in claim 27, wherein the processing unit/control unit includes an arrangement configured to determine fixed image points from the generated image information, an arrangement configured to determine image coordinates of the at least one fixed image point in at least two images of one image sequence, and an arrangement to determine the measured value from the image coordinates, the measured value being used for vehicle dynamics control.

31. (New) The device as recited in claim 30, wherein the at least two images are successive.

32. (New) The device as recited in one claim 27, wherein the processing unit/control unit includes an arrangement configured to determine at least one of i) a rotational vector of the motor vehicle, and ii) at least one motion vector of the motor vehicle, from the generated image information.

33. (New) The device as recited in claim 27, wherein the processing unit/control unit includes an arrangement configured to determine at least one of: i) a yaw rate, ii) a yaw angle, and iii) a lateral acceleration of the motor vehicle, from the generated image information.

34. (New) A processing unit/control unit for controlling vehicle dynamics in a motor vehicle, comprising:

- an arrangement configured to process at least one measured value, which is recorded by at least one sensor, the measured value being used for vehicle dynamics control;

- an arrangement configured to control at least one actuator for vehicle dynamics control; and

- an arrangement configured to process image information from at least one image sensor system, the image sensor system including at least two image sensors which record same scene, the at least one image sensor system including at least one stereo camera.

35. (New) The processing unit/control unit as recited in claim 34, further comprising:

an arrangement configured to determine at least one rotational vector of the motor vehicle, from the generated image information, the at least one rotational vector being, at least one of a yaw rate and a yaw angle.

36. (New) The processing unit/control unit as recited in claim 34, further comprising:

an arrangement configured to determine at least one motion vector of the motor vehicle from the generated image information, the at least one motion vector being a lateral acceleration.

37. (New) A storage medium storing a computer program, the computer program, when executed by a computer, causing the computer to perform the steps of:

processing at least one measured value, which is provided by at least one sensor, the measured value being used for vehicle dynamics control;

controlling at least one actuator for vehicle dynamics control; and

processing image information from at least one image sensor system, the image sensor system including at least two image sensors which record a same scene.

38. (New) A sensor unit for a motor vehicle, comprising:

at least two image sensors configured to record a same scene in a vehicle surround;

an arrangement configured to generate image information regarding the vehicle surround area based on information from the at least two image sensors; and

an arrangement configured to determine at least one of a rotational vector and a motion vector based on the generated image information.